

RAPID AND PARTICIPATORY APPRAISAL
FOR HEALTH AND NUTRITION

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ABSTRACT

A quiet methodological revolution has occurred through three intermingling streams of innovation: rapid rural appraisal (RRA), originating in the late 1970s from disillusion with biases in rural development tourism and with bad and delayed data from large surveys, and used mainly with natural resources and livelihoods; rapid assessment procedures (RAP), developed in the 1980s with anthropological approaches and used for health and nutrition; and most recently, Participatory Rural Appraisal (PRA), a versatile semi-structured process of learning from, with and by rural people about rural conditions. PRA has shown that with good rapport and appropriate methods and materials, rural people have a greater capacity to map, model, quantify, rank, score, diagram and analyse than has been commonly supposed. Actual or potential applications for health and nutrition related programmes include participatory social, demographic and health mapping of villages, seasonal analysis of deprivation and disease incidence, ranking wealth and wellbeing, matrix ranking, and time lines and trend analysis. To realise the potential of these approaches requires outsider professionals to overcome trained disabilities by being humble, showing respect, and facilitating learning from, with and by village people.

A Quiet Revolution

The 1980s have witnessed a quiet methodological revolution. There has been, over the past decade or so, an "explosive growth and diversification of rapid assessment procedures" (Cernea 1990:1). At the same time, the new approaches and methods still appear largely unperceived, and sometimes scorned, by many normal professionals. This paper outlines some of the history, principles and methods of rapid assessment or appraisal, and actual and potential applications in health and nutrition. Three intermingling streams of activity can be identified: rapid rural appraisal; rapid assessment procedures; and participatory rural appraisal.

Rapid Rural Appraisal (RRA)

The philosophy, approaches and methods now known as rapid rural appraisal (RRA) (Khon Kaen 1987; McCracken et al 1989) began to emerge in the late 1970s. They originated in growing awareness both of the distorted views gained from rural development tourism (the brief rural visit by the urban-based professional) (Chambers 1983:10-25), and of the limitations of many large-scale and long-drawn-out questionnaire surveys. In most professions and disciplines quicker and more cost-effective methods were being invented and used, but practitioners were reticent to write about them for fear of ridicule or rejection by their professional peers. In the 1980s, however, RRA came of age. It was recognised that it had its own paradigm and rigour (Khon Kaen 1987; Jamieson 1987), and articles describing methods and findings were published in "hard" journals.

In establishing principles and methods of RRA, many people and institutions took part. The diversity can be guessed from the long list of countries where RRA has been practised and evolved, including as it does Australia, Bangladesh, Benin, Ethiopia, Fiji, Ghana, Guatemala, India, Indonesia, Kenya, Mali, Nepal, Nigeria, Pakistan, Papua New Guinea, Peru, the Philippines, Sierra Leone, Sri Lanka, Sudan, Tanzania, Thailand, the United Kingdom, Zambia and Zimbabwe. Much of the mainstream has been concerned with farming systems and with livelihoods. Perhaps the strongest and most creative tradition has been that of agroecosystems analysis, pioneered by Gordon Conway and others at the University of Chiang Mai and elsewhere, stressing the value of observation, mapping and diagraming; and it was the University of Khon Kaen in Thailand which did most to establish its credibility, stressing the management of multidisciplinary teams and the techniques and value of semi-structured interviewing. Most recently, the International Institute for Environment and Development in London has played a leading role.

Rapid Assessment Procedures

In health and nutrition, general RRA applications were outlined in the early 1980s (e.g. Pacey 1982). More recently, there have been numerous, have been specialised applications. These include assessment of health services (Attah 1985; Nicholas 1990), of nutritional status and problems (Kashyap and Young 1989; Appleton 1990; Kashyap 1990; Hubeis 1990; Teller 1990; Young 1990), of food security (Maxwell 1989) and of relief needs in emergency situations (Slim and Mitchell 1990).

Other rapid procedures for assessment in health and nutrition have evolved in parallel, and largely independently of other RRA. Rapid assessment of community health needs led by a team from the Liverpool School of Tropical Medicine has been undertaken in urban areas - Mbeya in Tanzania, and Liverpool in the UK (Annett and Rifkin 1988). And among

others, medical anthropologists have been active (e.g. Bentley et al 1988), emphasising qualitative investigations.

The most prominent and widespread development has, however, been Rapid Assessment Procedures (RAP) (Scrimshaw and Hurtado 1984, 1987). These were developed during the 1980s to improve understanding of the successes and problems implementing the recommendations of the Alma-Ata Conference on Primary Health Care. The RAP approach and methods were evolved, tested and spread under the auspices of the United Nations University, UNICEF, and the University of California, Los Angeles. RAP was used in 16 countries in the mid-1980s. Practitioners have met, compared experiences, and refined their methods several times, the most recent being in November 1990.

RAP draws on and uses anthropological methods, stressing systematic recording in field notes; the use of informal interviews (with checklists rather than questionnaires), conversations, observation, participant observation, and focus groups; the selection, training and supervision of field workers; and methods of data analysis and presentation. RAP is sensitive to emic perceptions, and to cultural dimensions and differences. It has also found common features across cultures, for example that "rudeness on the part of government health services staff was a deterrent to the use of services in most of the communities studied" (Scrimshaw and Hurtado 1987:2). RAP in various forms, including those specially developed for particular diseases such as epilepsy and AIDS, seems set to continuing spreading as its power and utility is more widely recognised.

Participatory Rural Appraisal

The third, most recent, stream or family of approaches and methods is participatory rural appraisal (PRA). This has evolved as an outgrowth of RRA. The mode of RRA has been mainly extractive: "we" have gone to rural areas, learnt from "them", and then gone away and analysed the data. To quote a recent source "The major advantage of RRA is its ability to generate, in a short time, information that can then be used by development planners" (Kashyap and Young 1989:47). In contrast, PRA shifts more of the presentation and analysis of information to "them", more of which is undertaken there, in the field.

PRA can be defined as a semi-structured process of learning from, with and by rural people about rural conditions. The term was probably first used in Kenya to describe village-level investigations, analysis and planning undertaken by the National Environment Secretariat in association with Clark University, USA (NES et al. 1990). In 1988, a form of PRA was introduced in India in a joint exercise of the Aga Khan Rural Support Programme (AKRSP) in Gujarat and the International Institute for Environment and Development, London (McCracken 1988). Since then it has evolved rapidly and spread, with MYRADA, an NGO based in Bangalore (Mascarenhas 1990) taking a leading role, with other NGOs such as AKRSP in Ahmedabad, Action Aid in Bangalore, SPEECH in Madurai, and PRADAN and Krishi Gram Vigyan Kendra in Ranchi, all active and innovating, and major training institutions (the LBS National Academy of Administration, Mussoorie, the IG National Forest Academy, Dehra Dun, the Indian Institute of Forest Management, Bhopal, and the Institute of Rural Management, Anand) in the process of introducing PRA into their syllabi and field exercises. Nepal also now has a PRA network with over 150 members.

The main applications of PRA have so far (late 1990) been at the community level with participatory appraisal and planning, leading through into the implementation of plans. These have been concerned mainly with natural resources, especially watershed management and social forestry, but increasingly applications are being explored in health and nutrition.

Principles of RRA/RAP/PRA

Though their emphases differ, all these approaches share an underlying rigour in the application of principles. Many would probably agree on the following:

- learning rapidly and progressively, with flexible use of methods, improvisation, and iteration, not following a blueprinted programme but adapting in a learning process
- offsetting the biases (spatial, project, person, seasonal, professional, diplomatic...) of rural development tourism, and not rushing but relaxing.
- learning from and with rural people, directly and face-to-face, seeking to understand their perceptions, priorities and needs
- triangulating, meaning using more than one, and often three, methods, sources, locations, positions in a distribution, etc to crosscheck and for a balanced perspective
- optimising, relating costs of learning to the useful truth of information, with trade-offs between quantity, relevance, accuracy and timeliness. The principles apply here of optimal ignorance - not trying to find out more than is needed, and of appropriate imprecision - not trying to measure what does not need to be measured, or not measuring more accurately than is necessary for practical purposes
- critical self-awareness and doubt, reflecting on what is being seen and not seen, who is being met and not met, what is being said and not said, embracing and learning from error, and consciously exercising judgement.

This last is the most recent principle to be articulated, and is the key to good PRA.

A Menu of Methods

In its early days, RRA seemed little more than organised commonsense. During the 1980s, however, creative ingenuity was applied and more methods invented, to make a much richer repertoire. Drawing on RRA, RAP and PRA, a summary listing can indicate some of the types and families of methods known, but without covering all:

- secondary data review
- direct observation, including wandering around
- participant observation, and being taught and doing village activities
- conversations
- key informants
- semi-structured interviews
- group interviews, including casual, structured, and focus groups
- chains (sequences) of interviews
- key indicators
- key probes (key questions to ask)
- workshops and brainstorming
- transects and group walks
- mapping and modelling
- aerial photographs
- diagramming
- ranking and scoring, including wealth and wellbeing ranking
- quick quantification
- ethnohistories
- time lines (chronologies of events) and trends

- folk taxonomies
- stories, portraits and case studies
- team management and interactions
- short, simple questionnaires, late in the RRA process
- rapid report writing in the field

In RRA and PRA, diagramming and ranking and scoring have provided some of the less obvious methods. Diagramming has come to include many topics, aspects and techniques, such as transects, seasonalities, spatial and social relations, institutions, trends and ecological history. Ranking methods have been evolved to elicit people's own criteria and judgements. These and other methods have been modified and developed, and the invention of more can be expected in coming years.

Reflections on PRA

The approach and methods of PRA are recent. Many antecedents can be found (see e.g. Rhoades 1990), and FRA, earlier RRA, and RAP have much common ground. However, PRA as evolved in 1990 in South Asia (notably in India and Nepal) has its own combinations of approach and methods which are spreading rapidly and almost spontaneously, with large-scale demands for training from Government organisations.

PRA shares much with its parent, RRA, but is distinguished from it in practice in South Asia by correcting two common errors: roles of investigation are reversed; and rushing is replaced by relaxation and rapport.

First, the roles of teacher and learner are reversed. They teach us. Rural people own more of the process and output. Investigation, presentation and analysis are done more by them themselves, including visual sharing of information in maps, models, and diagrams, and quantification made and presented by them. Most of the activities which we thought we had to do - interviewing, transects, mapping, measuring, analysis, planning - are done jointly with villagers or by them on their own. The appraisal and learning are not just by us from them, but with them and by them.

Second, rapport with villagers is of primary importance. To achieve good rapport often requires the reorientation and relaxation of outsiders, and self-critical awareness. Rural people's incapacity and ignorance have often been an artifact of our ineptitude. With few exceptions, we - the outsider professional community - have not known how to enable them to express, share and enhance their knowledge. The ignorance of rural people has then been a self-sustaining myth, created and maintained by our confident and overweening clumsiness. By wagging the finger, holding the stick, sitting on the chair behind the table; by dominating and interrupting thought and speech; by being rushed and impatient; by demanding information and answers; by believing that we know and they are ignorant, that they are the problem and we are the solution; by failing to sit down with respect and interest and listen and learn - in these ways we have impeded expression of knowledge and creative analysis by rural people.

The key is, then, that outsiders have and show appropriate attitudes, demeanour and behaviour. These include:

- * basic respect for rural people
- * interest in what they know, say and show
- * unhurried patience, wandering around, not rushing, not interrupting
- * participation by the outsider in village activities
- * humility
- * materials and methods which empower villagers to express, share, enhance and analyse their knowledge

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Given these, the results can astonish. I have a prejudice that rural people know more, and are more rational and capable, than most outsider professionals give them credit for. But even so, I have been amazed during the past year at the wealth of detailed information presented and analysed by village people. Social anthropologists (see e.g. Rhoades 1990) and others can legitimately point out that much of this has been known and tried in the past. What is new is the combination of attitudes, behaviour and methods and their synergism and spread.

Many of the methods also have four strengths.

The first is visual sharing. Diagrams, maps or quantification are presented physically by rural people in a manner which they readily understand, since they have created them, and which can be crosschecked and amended. Successive approximation is thus built into the process.

The second strength is ranking and scoring, rather than measuring. Of course, measurements and estimates can be and are sought. But especially for sensitive information like income or wealth, people are often willing to present relative values when they would conceal or distort absolute values. In seasonal analysis, for example, people readily use seeds or other counters to show relative amounts of income and expenditure by month. Similarly, with changes and trends over time, relative values can be given. Ranking items by people's own criteria, and scoring different items out of ten, five or three, have also proved feasible and popular.

Third, combinations and sequences of methods have proved powerful and practical. Participatory mapping and modelling, where villagers make their own map or model on the ground or on paper, leads easily and naturally on to other activities such as discussing routes for walking transects in which they are guides, to household listings and wealth ranking, to identifying numbers and types of people in a community, and to marking in other details.

Fourth, the approach and methods are popular and empowering. Questionnaires are often a bore for all concerned. PRA methods are often enjoyed by all concerned. We have had to learn not to interrupt and not to interrupt when people are being creative with a map or model, when they are thinking, when they are reflecting on estimates. People are no longer "respondents". They are players, performers, presenters, and the play, performance and presentation are theirs, created and owned by them. And the word "fun" enters the development vocabulary.

Applications of PRA in health and nutrition-related programmes

In addition to applications of the older RRA and of RAP, there are many potential uses of PRA in health and nutrition related programmes. Discussion here will outline five of the more obvious.

i. participatory mapping: people, health, nutrition....

In India, participatory mapping has shown that villagers' mental maps are often detailed and extensive. They are more so than those of most urban dwellers in the North who have provided much of the earlier evidence on mental maps (Gould and White). They surpass what most outsiders might expect. (A senior scientist, having seen slides of maps made almost spontaneously by villagers, recently asked me "How long did it take you to teach them to do that - one year, two years?"). If the rapport and materials are right, maps can be diagrammed on the ground or drawn on paper in a matter of minutes to show all the houses or huts in a small village (say 10 - 20 minutes for 50 households, while larger villages take longer), and need a representative group of mappers. For diagramming on the ground, literacy appears to be irrelevant. Maps can

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be drawn on the ground with a stick, or coloured with powders. Stones, seeds and other markers can be used to add detail. Some of the best maps have been using coloured chalks on flat cement or stone surfaces. For practical guidance, see Mascarenhas 1990a.

Participatory maps can lead rapidly into the presentation of social information. Villagers in India often mark in the castes of households using colour codes. Recently, seeds have been used to present rapid censuses of villages. In a process recently facilitated by a senior Forest officer (S.K.Pande) on the outskirts of Hyderabad, two young men and a boy (Bhaskar, R. Shankar and K. Haribabu) recently made a chalk map of 40 households in their hamlet of Chandanagar. After an initial briefing, they did this in about half an hour, and with no outsider present. They then took only about five minutes to present a village census on the map using different types of seed for men, women and children, while others who were watching crosschecked and confirmed. The oldest mapper then copied the map and census details direct onto an overhead transparency.

Health mapping has also been developed by John Devavaram of SPEECH, James Mascarenhas of MYRADA, and Sam Joseph and Bhakthar Solomon of Action Aid. Villagers use seeds, bindis (the small spots women wear on their foreheads), stones or other markers, and place these to indicate households with pregnant women, persons who are handicapped, malnourished children, or widows. Relative wealth and poverty have also been marked in with colour codes.

A recent innovation is the use of small models of houses, wells, handpumps and temples, developed by Joseph and Solomon. These are arranged by villagers in their correct positions. In Iyyanhalli village, Jaglur Taluk, Chitradurga District, where this was first done, the roofs of houses were colour-coded with green for thatch, black for black tiles, and red for red tiles. The model was used to identify, house by house, the names of household heads (later used for wealth ranking), households with no adult literates (for focussing an adult literacy programme), the educational status of children in each household, children under one year of age (for health follow up), immunisation status, pregnant women (for health education), and cattle ownership. By marking details on the model houses, a permanent record, visible to all the village, is being kept and used for planning and monitoring health and nutrition programmes.

Should participatory mapping of households and health become a standard practice in community health programmes?

ii. seasonal analysis

Villagers in India have shown ability to estimate and rank conditions which vary seasonally. Festivals, major seasons, months, or kartiks (fortnightly periods distinguished and named especially during the monsoon) are used to define times of year and intervals. Most commonly, months have been used, represented by 12 stones. Villagers then use seeds or other counters, or sticks which they break to required lengths, to estimate and rank such conditions as numbers of days of rain, amount of rain, soil moisture, numbers of days (or proportion out of 10) of agricultural labour in each month, income, expenditure, debts taken, food availability, and so on. When drawn as a histogram, this information points clearly to the months of greatest difficulty and vulnerability.

The prevalence of diseases by season has been one of the conditions indicated. In one case near Madurai (pers. comm. John Devavaram), villagers indicated by month the number of cases of different diseases during the previous year.

Should participatory seasonal analysis become a standard practice in community health programmes?

iii. ranking of wealth and wellbeing

Wealth ranking (Grandin 1988, RRA Notes 2, 4 and 7, Young 1990) is an ingenious and simple method of eliciting relative wealth or wellbeing in a community. Knowledgeable informants are presented with slips of paper, one for each household, and asked to place them in piles according to their wealth or poverty, or according to their wellbeing or illbeing, depending on local criteria. The piles, usually 3 to 6 in number, are then checked. The criteria used can be elicited by asking, for example, why each household in the worst off pile, was placed there. It usually emerges that there are four or five different criteria (far more subtle and realistic than a crude poverty line) for the rankings, and respondents weigh these mentally in making their allocations to wealth or wellbeing groups.

Wealth ranking is increasingly being used by NGOs in India to identify the poorest and those most at risk.

Should wealth and wellbeing ranking become a standard practice in community health programmes?

iv. matrix ranking and scoring

Matrix ranking and scoring (RRA Notes 1 and 3) is a method for assessing entities in a class, such as fodder trees, varieties of a crop, types of firewood, domestic animals, or even political parties and political leaders. The entities are selected, their good and bad qualities listed to elicit criteria, and then ranked or scored for each criterion. The method can be taught as a routine, and generates insight into other people's criteria and preferences. Rural women, for example, readily indicate their preferences for different fuelwoods according to such factors as availability, ease of collection, and quality of smoke in the kitchen.

To my knowledge, matrix ranking and scoring has not been used directly in health and nutrition, but there are potential applications such as for assessing different foods, methods of cooking, fuel types, treatments for diseases, and sources of treatments for diseases.

Should the potential of matrix ranking in community health programmes be explored?

v. time lines and trends

Time lines establish past events which are well known and which provide a framework of discussing changes which have taken place. Changes in the composition of diets can be quantified using counters. In one case an old woman showed with small stones the main staples she ate as a girl, and those she ate now, using 12 stones for her staples as a girl, when she ate more, and only 8 for now, when she eats less. Trends can be shown and estimated in various ways. Presumably, such health and nutrition-related aspects of life as changes in diet, the prevalence of diseases, treatments, costs of treatment, and ways of raising resources for treatment, could be analysed. Indeed, in some places these may already be standard questions in health and nutrition appraisal.

Should the potential of time lines and trend analysis in community health programmes be further explored?

The Future

Developments with RRA, RAP and especially PRA have themselves been so rapid that it is not easy to make a secure judgement about their

ultimate potential. The inventions, improvisations, combinations and sequences of methods are already numerous. Frontiers for innovation include time use studies (being explored by the Institute for Rural Health Studies, Hyderabad), and participatory monitoring and evaluation of community health programmes. There are dangers that forms or rapid and participatory assessment and appraisal, by whatever labels they are known, will spread and be adopted too fast, without changes in outsiders' attitudes and behaviour, and will then be discredited. As with any other approaches and methods, when done badly the outcomes will be bad. Also, for many Government organisations and staff these approaches require something of an institutional and personal revolution. Even for NGOs, much reorientation is often required. These approaches and methods are no panacea. Nor are rural people always right, and outsiders always wrong. But the experience to date does suggest that a new balance can be struck in the mix of knowledge, insight, ideas, and creativity between outsiders and rural people, with outsiders metaphorically and literally sitting down, "handing over the stick", listening and learning, and empowering their clients.

These reversals of behaviour and learning may be more difficult for professionals in medicine than in some other fields. The dominant medical value system embodied in the teaching of medical schools points away from rural life. Of the values of the vast majority of medical students in India, N.H. Antia recently reaffirmed that "The glamorous high tech and lucrative fields like medicine and surgery and their subspecialties like cardiology and plastic surgery are the first choice while preventive and social medicine and community health are at the bottom of the ladder" (Antia 1990:1571). This can only be reinforced by the fact that indigenous technical knowledge is often somewhat weaker in health than in agriculture, so that in consequence external scientific knowledge is relatively stronger. And even more than agriculturalists, doctors receive a training which conditions them to believe that they know best, and that they are right in what affects human beings. Many are used to being superior to their clients. They may not find it easy to sit on the floor. In matters of dress and demeanour (and not only the symbolic stethoscope), many distance themselves from rural people. They then, like other professionals, look upwards and away towards urban wealth and high technology. For rural work, for rapport with rural people, they are victims of dominant professional values and of trained disability.

For many medical professionals, to make "flips" or reversals, and to see things the other way round, is, then, likely to be difficult. But unless that is achieved, the relaxed rapport which releases the knowledge and creativity of rural people will be weak. The needs now are not just for new ways of learning from, with and by the poor, but also for new ways of unlearning and reorientation for the professions concerned most with health and nutrition.

Experience with participatory training in India so far suggests that professionals vary a lot. Some will never be able to change, and that is not their fault. Others start straight away and experiment and field test on the basis simply of ideas, such as those in this paper. Such people can invent and adapt methods on the run. Such pioneers could gain from the field experiences organised in India by MYRADA, Action Aid, and AKRSP. Typically, these involve four or five days camping in a village, and provide opportunities to learn in various ways from and with villagers, and to test and use a variety of methods. Self-selected professionals in health and nutrition who are interested are the best people to start. They can innovate and enable the participatory approach and methods to evolve into different forms. Let me hope that any who read this paper will be encouraged to do so, and to pass on their experience to others.

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SOURCES ON RAPID AND PARTICIPATORY RURAL APPRAISAL

The two following general sources are free on request, and are one way of keeping up-to-date with some current developments:

The PRA/PALM Series, available from Vidya Ramanchandran, MYRADA, 2 Service Road, Domlur Layout, Bangalore 560 071. (PALM = participatory learning methods)

RRA Notes, available from Sustainable Agriculture Programme, International Institute for Environment and Development, 3 Endsleigh Street, London WC1H 0DD.

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Note: ICRAM refers to the International Conference on Rapid Assessment Methodologies for Planning and Evaluation of Health Related Programmes, sponsored by IDRC, Pan American Health Organization, Plan International, United Nations University, UNICEF, and WHO, held at the Pan American Health Organization Headquarters, 525 23rd Street NW, Washington DC 20037, November 12 - 15 1990. Over 40 papers and statements were presented, including several from South Asia, only a few of which are listed here.

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